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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/626,574 07/27/00 MAY

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EXAMINER

LUU, A

ART UNIT

PAPER NUMBER

2816

DATE MAILED:

05/03/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/626,574

Applicant(s)

MAY, MICHAEL R.

Examiner

An T. Luu

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-3, 10, 12 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "moderate" in claim 2, line 33-4 and 6, is a relative term which renders the claim indefinite. The term "moderate" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. This problem also occurs in claims 12 and 18.

Claim 3 appears to be misdescriptive because "a first inverting logic element" (NAND gate) is the one receiving two inputs (i.e. the pulse signal and output of the second inverting logic element).

As to claim 10, the limitation "filter module produces a second pulse signal in response to an edge of the processed logic signal" is misdescriptive since the filter produces signal in response to an edge of the processed logic signal and the processed signal is a result derived from the first **and/or** second gating devices. One cannot tell if the output the filter is a result from the first **or** second gating devices.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 6, 9, 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by the Farrell et al. reference (U.S. Patent 5,510,740).

The Farrell et al discloses in figure 8 an apparatus comprising a filter 820 received an input signal (reset signal) 802 via a processing element 816 for producing a pulse signal 826 and a latch 824 coupled to the filter for latching the pulse signal as claimed in claims 1, 6, 9 and 15.

It is noted that signal 802 is received from a terminal which is an input gating device.

As to claim 11, it is inherent that there is two modes for a gating device (i.e., ON/OFF).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3, 7, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Farrell et al. reference (U.S. Patent 5,510,740) in view of the Tsukikawa reference (U.S. Patent 6,121,812).

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The Farrell et al discloses all the claimed invention except for having a latch element comprising specific components being configured as claimed. Tsukikawa discloses in figure 8 a latch circuit 30 comprising a first inverter 42 and a second inverting logic element (NAND gate 43) being configured as recited in claims 2-3 and 9. It would have been obvious to one skilled in the art to replace a generic latch circuit disclosed by Farrell by the one taught by Tsukikawa because the skilled artisan in the art would easily recognize that a latch circuit can be implemented in many different ways in the art without patentable distinction. The selection among different designs of a latch is seen as a design expedient dependent upon the particular requirement of the application.

As to claims 7 and 16, latch 30 receives a second input logic signal IN via filter 3 as required by claim.

7. Claims 4-5, 13-14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Farrell et al. reference (U.S. Patent 5,510,740) in view of the Okada reference (U.S. Patent 4,306,198).

The Farrell et al discloses all the claimed invention except for having a filter element comprising specific components being configured as claimed. Okada discloses in figure 3 an apparatus comprising a capacitor C coupled to the input T1 and a gating circuit, including a controlled impedance Q5, Q6, coupled to the capacitor such that the capacitor and an impedance of at least one element of the gating circuit are tuned based on the rise time and fall time of the input signal as required by claims 4-5 and 13-14. It is noted that an inverter is not required since the output of the inverter is connected to a drive transistor Q1, if the complementary type of Q1

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is used instead. It would have been obvious to one skilled in the art to replace a generic filter circuit disclosed by Farrell by the one taught by Okada because the skilled artisan in the art would easily recognize that a filter circuit can be implemented in many different ways in the art without patentable distinction. The selection among different designs of a filter is seen as a design expedient dependent upon the particular requirement of the application.

As to claim 17, the scope of this claim is similar to the combination scope of claims 9 and 13-14. Thus, it is rejected for the same reasons set forth above.

As to claim 18, the scope of this claim is similar to that of claims 2 or 12. Thus, it is rejected for the same reason(s) set forth above.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Farrell et al. reference (U.S. Patent 5,510,740) in view of the Tsukikawa reference (U.S. Patent 6,121,812) and further in view of the Okada reference (U.S. Patent 4,306,198).

The scope of claim 8 is similar to that of claim 2. Thus, the rejection set forth above for claim 2 is also applicable herein.

Conclusion


9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 703-308-4922. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

An T. Luu 
April 27, 2001


TIMOTHY P. CALLAHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800